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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

November 13,2003

Mr. Stephen Garth
Atlantic Division Naval Facilities Engineering Command
Code EV22DH
1510 Gilbert Street
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Re: EPA review of Draft Work Plan for the Expanded Remedial Investigation Work Plan for Site 2 and Site 5 and the Draft Remedial Investigation/Human Health Risk Assessment/Ecological Risk Assessment Site 2; St. Juliens Creek Annex, Chesapeake, Virginia; September 2003

Thank you for the opportunity to review and comment on the Draft Site 2 Expanded Remedial Investigation Work Plan, and the Draft Site 2 Remedial Investigation, HHRA/ERA. Please consider the following comments with regard to the subject documents.

Ecological Comments:

BTAG agrees with the results and conclusions of the RI including the recommendation to further evaluate chemical transport pathways to sediments in the main body of St. Juliens Creek. Spatial analysis of nature and extent of contamination, including potential gradients and comparison to existing data from the Creek and the Elizabeth River, should also be performed. This information should be also used in the ecological risk assessment. (see comments on the Draft WP for the Expanded RI below)

Draft Work Plan for the Expanded Remedial Investigation at Site 2 and Site 5

1. Section 3.2.2.1, Sediment Sampling, on page 3-5 states that sediment will be collected with a stainless steel shovel and/or trowel or hand auger. This method should only be used when there is no overlying surface water. Alternate methods that minimize the potential loss of fine-grained sediments should be used where there is overlying surface water.

2. Section 3.2.2.2, Site 5, states that 28 additional surface soil samples will be collected. Consideration should be given to sampling at deeper depths, at least with a subset of the samples, particularly if there is evidence of burning/soil staining at lower depths.

3. Section 3.4, Data Evaluation and Reporting, on pages 3-9 and 3-10 provides a summary of how data will be evaluated. There is no statement of whether the data will be evaluated quantitatively for potential ecological risk. BTAG recommends that the new data be combined with the historical data and evaluated for potential ecological risk.

4. Section 3.4.1, Site 2 Data Evaluation, on page 3-9 states that if the reference sediment data set is not representative of anthropogenic data, the use of reference data will be re-evaluated. The meaning of this statement is unclear. It is also unclear how this determination would be made. Instead of comparing mean reference concentrations to mean site concentrations, BTAG recommends that all existing data be used to evaluate concentration trends in sediment from St. Juliens Creek upstream and downstream of the site to determine the significance of the release from Site 2.

Groundwater:

The number of wells added for site 2 seems OK, but I can't figure out from the report why only 3 wells from site 5 will be sampled. Although the other wells from site 5 will have water levels taken, it is not clear why all of them will not be sampled. Additionally, the wells from site 5 may have to be redeveloped, not just purged, prior to sampling since it has been some time since they were sampled.

Additionally, the RI for site 2 indicated that the tidal survey was 'inconclusive". It is recommended that a proper tidal survey be conducted in order to adequately address the potential is necessary at the site.

Site 2 HHRA Comments:

Page VI

The report states that no MCL exceedances were noted in deep gw (Yorktown Aquifer). The text should also indicate whether *RBC* exceedances were observed in this aquifer. (This comment also applies to pages 5-17 and 9-1.)

Page VII

Risks from contaminants in shallow gw (Columbia Aquifer) were not evaluated because this aquifer "is not considered a regional potable water source." More concrete justification for excluding this pathway should be provided. For example, if this aquifer is not potable because of poor water quality (perhaps due to saline intrusion) or low yield, statements to this effect should be included in the report. (This comment also applies to pages 7-7 and 9-3.)

Section 5.1.3.2

The Final Background Investigation Report for this site was prepared in 2001. Since then, EPA has issued guidance describing procedures for delineating representative background conditions. While the approach used for this site does not conform to the recommendations made in the more recent EPA guidance, concentrations used to represent background at St. Juliens Creek seem reasonable.

Section 7.5.2.10

While the arithmetic average concentration for lead is less than 400 mg/kg, a few high hits (up to 8850 mg/kg) were observed in on-site soil, as noted in this section of the report. I recommend performing an outlier test to determine whether some of these hits should be evaluated separately from other soil data.

Please feel free to contact me if you have any question or concerns regarding these comments.

Sincerely,

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